

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FIL	ING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,883	10/791,883 03/04/2004		Ming Tang Huang	MR2349-993	4802
4586	7590	03/10/2006		EXAMINER	
	ERG, KLEI		PAPE, ZACHARY		
3458 ELLICOTT CENTER DRIVE-SUITE 101 ELLICOTT CITY, MD 21043				ART UNIT	PAPER NUMBER
				2835	
				DATE MAILED: 03/10/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/791,883	HUANG, MING TANG				
Office Action Summary	Examiner	Art Unit				
	Zachary M. Pape	2835				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	I. lely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 04 M	larch 2004.					
2a) This action is FINAL . 2b) ⊠ This	This action is FINAL . 2b)⊠ This action is non-final.					
	•					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims		·				
 4) Claim(s) 1-6 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) Claim(s) is/are allowed. 6) Claim(s) 1-5 is/are rejected. 7) Claim(s) 6 is/are objected to. 8) Claim(s) are subject to restriction and/o 						
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on <u>04 March 2004</u> is/are: Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine 11.	a) \square accepted or b) \bowtie objected to drawing(s) be held in abeyance. See tion is required if the drawing(s) is obj	e 37 CFR 1.85(a). lected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s) 1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
 2) Notice of References Cited (PTO-552) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 	Paper No(s)/Mail Da					

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the connection paths, and the plurality of air guiding holes of claim 2 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filling date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claim 1 is objected to because of the following informalities:

In line 12, "and the positioning elastic trip forming" appears to be incorrect. The examiner recommends changing it to read, "and the at least one positioning elastic strip forming".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

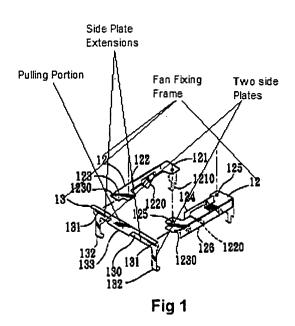
Claims 1, 4, and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Lai (US 6,525,941).

With respect to claim 1, Lai teaches a heat dissipation module for a CPU, suitable for installation above the CPU and base socket, comprising: a heat dissipation device (20), having a plurality of heat dissipation fins, flowing paths being formed between the fins; a fan fixing frame (Comprising 12 and 13), fixed above the heat dissipation device, the fan fixing frame having a top plate (As illustrated in present office action Fig 1 below), two side plates (As illustrated in present office action Fig 1 below), a plurality of the elastic pressing components (1220) and at least one positioning elastic strip (126), the two side plates extending from opposite sides of the top plate, the two

Application/Control Number: 10/791,883

Art Unit: 2835

side plates extending (Toward each other) to form a pulling portion (133) and (Toward the CPU) to form a plurality of clipping portions (132), the elastic pressing components being installed on the top plate, the positioning elastic strip being installed on the top plate, and the positioning elastic strip forming at least two pushing portions (123) to touch an outer surface of the two side plates (As illustrated in Lai Fig 3); and a fan (110) fixed on the top plate of the fan fixing frame; wherein the fan fixing frame is installed above the base socket by using the clipping portions (132) to connect with related clipping arms (41) on the two sides of the base socket, the elastic pressing components having the elastic force to press the heat dissipation device onto the heat exhausting surface of the CPU (Column 4, Lines 37-40).



With respect to claim 4, Lai further teaches that the fan fixing frame has a opening hole (Between each portion 12) and four connection holes (125), and the fan

faces the opening hole and uses four screws (114) to penetrate four comers of the fan fixing fame by screw connection at related connection holes (As illustrated in Lai Fig 2).

With respect to claim 5, Lai further teaches that the pulling portion of the fan fixing frame is formed by outer extension of the two side plates, the pulling portion having a free and upper end, the clipping portion being formed by downward extension of the two side plates (As illustrated in Lai figure 2, and Present office action Fig 1 above).

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

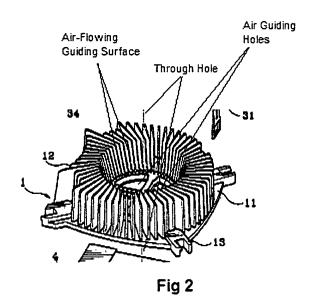
Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lai in view of Liu (US 5,943,209).

With respect to claim 2, Lai teaches the limitations of claim 1 above, but fails to teach the limitations of claim 2. Liu teaches a heat dissipation device with a through, hole with a shape feature of penetrating the heat dissipation device from top to bottom, flowing paths (Between each Fin, 12) having connection paths through the bottom, top and outer side of the heat dissipation device, a side wall of the through hole having an air-flowing guiding surface (As defined by the fin area defining the through hole) at a top area and a plurality of air guiding holes at a bottom area, the air guiding holes

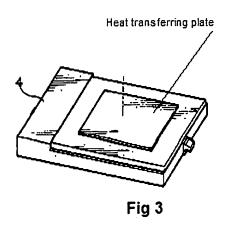
Art Unit: 2835

connecting with the flowing paths (See present office action Fig 2 for more detailed annotations). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Liu with that of Lai to efficiently carry heat away from the heat sink module (Liu Column 2, Lines 49-50).

Page 6



With respect to claim 3, Liu further teaches a heat transferring plate installed in a bottom position to face the through hole of the heat dissipation device and contact the heat exhausting surface of the CPU (See present office action Fig 3 below).



Art Unit: 2835

Allowable Subject Matter

5. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

With respect to claim 6, the allowability resides in the overall structure of the device as recited in dependent claim 6 and at least in part because claim 6 recites, "a hook portion on an upper side and a pressing portion on a lower side, the spring surrounding the connection part".

The aforementioned limitations in combination with all remaining limitations of claims 1 and 6 are believed to render said claim 6 patentable over the art of record.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary M. Pape whose telephone number is 571-272-2201. The examiner can normally be reached on Mon. - Thur. & every other Fri. (8:00am - 5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached at 571-272-2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/791,883

Art Unit: 2835

Page 8

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ZMP

LYNN FEILD
SUPERIOR CENTER 2800